

position.

- 2.7 The nozzle tip shall be seamless material with no notches, valleys, or grooves. The nozzle shall be designed for continuous service in a flue gas environment up to 2000 Fahrenheit without incurring measurable creep or oxidation.
- 2.8 The diffusers and deflectors shall be B&W standard design DRB conical diffuser and deflector set fabricated of nitride bonded silicon carbide. Any deflectors and diffusers supplied shall be shipped loose. All fastener hardware necessary for deflector and diffuser installation shall be included with each nozzle.
- 2.9 Welding:
 - 2.9.1 Circumferential Nozzle Tip Weld (Dissimilar Metal Weld):
 - a. 100 percent penetration
 - b. Single V-groove weld, non-symmetrical bevels:
 - 1. 37-1/2 degrees on the alloy
 - 2. 60 degrees on the carbon steel
 - 3. 1/16 inch groove face, 1/16 inch groove space)
 - c. First pass shall be a Gas Tungsten Arc (TIG) weld with ENiCrFe-3 filler.
 - d. All other passes shall be SMAW with ERNiCrFe-3 rod.
 - 2.9.2 All nozzle welds shall have no cracks, lands, grooves, or ledges, and shall be blended/ground smooth to the nozzle wall.
- 2.10 The nozzle shall be straight and true throughout the entire length to within 1/8 inch. The nozzle shall be straight and true throughout the ceramic lined section to within 1/16 inch.
- 2.11 Windbox seal plate shall be shipped loose in two sections per nozzle plate. Seal plate shall be 3/8 inch thick, 22-3/4 inches I.D. by 28 inches O.D.. Seal plate shall be provided with 1/2" holes equally spaced on a 26" bolt circle at 45 degrees apart (8 total per seal plate).
- 3.0 QUALITY ASSURANCE
- 3.1 The vendor shall implement a Quality Assurance Program, complete with documentation verifying that each nozzle complies with the requirements of this specification. These documents shall be provided to the owner upon request.